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RAW SEQUENCE LISTING DATE: 12/27/2002
PATENT APPLICATION: **US/09/820,598** TIME: 14:16:10

Input Set : **A:\57477-A-PCT-US.txt**
Output Set: **N:\CRF4\12272002\I820598.raw**

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 3 <110> APPLICANT: Thomas M. Jessell et al.
 5 <120> TITLE OF INVENTION: GENE ENCODING MNR2 AND USES THEREOF
 7 <130> FILE REFERENCE: 0575/57477-A-PCT-US/JPW/SHS/MVM
 9 <140> CURRENT APPLICATION NUMBER: 09/820,598
10 <141> CURRENT FILING DATE: 2001-03-29
12 <160> NUMBER OF SEQ ID NOS: 4
14 <170> SOFTWARE: PatentIn version 3.1
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 300
18 <212> TYPE: PRT
19 <213> ORGANISM: chick embryo
21 <400> SEQUENCE: 1
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24 1               5                  10                  15
27 Leu Ala Glu Lys Pro Pro Arg Ser Ala Ser Pro Pro Gly Leu Ser Pro
28             20                  25                  30
31 Ala Gly Ser Pro Gly Pro Ala Gly Arg Thr Asp Thr Pro Ser Pro Arg
32         35                  40                  45
35 Ala Pro Gln Ala Ala Thr Pro Leu Gly Pro Ala Gly Phe Val Pro Lys
36     50                  55                  60
39 Pro Gly Leu Leu His Leu Pro Gly Pro Gly Leu Gly Thr Leu Pro Ala
40 65                  70                  75                  80
43 Leu Tyr Pro Pro Ala Val Tyr Pro Leu Pro Ala Leu Gly Gly Gln His
44                 85                  90                  95
47 Ala Ala Phe Ala Tyr Thr Ala Phe Pro Gln Leu Pro Pro Pro Gly Ala
48             100                 105                 110
51 Glu His Leu Lys Ala Ala Val Ala Gly Ser Phe Pro Leu Glu Gln Trp
52         115                 120                 125
55 Ile Arg Ala Gly Met Leu Val Pro Arg Leu Ser Asp Phe His Ala Thr
56     130                 135                 140
59 Pro Gln Ser Ala Leu Met Gly Lys Ser Arg Arg Pro Arg Thr Ala Phe
60 145                 150                 155                 160
63 Thr Ser Gln Gln Leu Leu Glu Leu Glu Asn Gln Phe Lys Leu Asn Lys
64                 165                 170                 175
67 Tyr Leu Ser Arg Pro Lys Arg Phe Glu Val Ala Thr Ser Leu Met Leu
68             180                 185                 190
71 Thr Glu Thr Gln Val Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp
72         195                 200                 205
75 Lys Arg Ser Arg Lys Ala Lys Glu Gln Gly Met Ala Val Glu Pro Glu
76     210                 215                 220
79 Lys Pro Arg Gly Leu Gly Lys Ala Asp Glu Ser Leu Leu Pro Ser Gln
80 225                 230                 235                 240
83 Pro Gln Gly Gln Ala Gly Asp Ser Pro Glu Phe Val Gly Cys Ser Pro
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84                 245                 250                 255
87 Gly Thr Gly Phe Leu Cys Arg Ser Ala Glu Leu Gly Tyr Asp Pro Asp
88             260                 265                 270
91 Ser Ser Cys Ser Gly Gly Glu Glu Asp Glu Glu Glu Glu Asp Asp Gly
92         275                 280                 285
95 Met Asp Thr Ala Glu Arg Lys Met Gly Ser Val Leu
96     290                 295                 300
99 <210> SEQ ID NO: 2
100 <211> LENGTH: 356
101 <212> TYPE: DNA
102 <213> ORGANISM: chick embryo
104 <400> SEQUENCE: 2
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109 atggacactg cggagaggaa gatgggctct gtgttgtgaa gaggttcccg ggtgaggagt    180
111 tggaccagtc tcggctggca gacacagact gtgcccatgt gcagcgtggg ggctgagggg    240
113 agcctgcccc ccccctcctt taacttatgt gtgtttggag tctatttaat gtgtaattat    300
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119 <211> LENGTH: 349
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129 Pro Pro Lys Ala Ala Ala Gln Ser Ala Pro Leu Ala Leu Val Thr Gly
130             20                  25                  30
133 Gly Ser Gly Gly Gly Ser Pro Pro Ser Ser Ser Ser Ser Ser Ser Ser
134         35                  40                  45
137 Ser Ser Ser Ser Ser Ser Glu Leu Pro Ala Asp Cys Pro Arg Thr Asp
138     50                  55                  60
141 Ser Pro Ser Pro Pro Arg Leu Leu Pro Ala His Cys Ala Leu Leu Pro
142 65                  70                  75                  80
145 Lys Ala Ala Phe Leu Gly Gly Gly Gly Pro Gly Gly Gly His Pro Gln
146                 85                  90                  95
149 His His Ala Leu Gly Leu His Pro Ala Gly Pro Gly Gly Pro Gly Leu
150             100                 105                 110
153 Tyr Gly His Pro Val Tyr Gly Tyr Pro Ala Leu Gly Gly Gln His Pro
154         115                 120                 125
157 Ala Leu Ser Tyr Ser Tyr Ser Gln Val Gln Gly Ala His Pro Ala His
158     130                 135                 140
161 Pro Ser Ala Asp Pro Ile Lys Leu Ser Ala Gly Thr Phe Gln Leu Asp
162 145                 150                 155                 160
165 Gln Trp Leu Arg Ala Ser Thr Ala Gly Met Ile Leu Pro Lys Met Pro
166                 165                 170                 175
169 Asp Phe Gly Ser Gln Ala Gln Ser Asn Leu Leu Gly Lys Cys Arg Arg
170             180                 185                 190
173 Pro Arg Thr Ala Phe Thr Ser Gln Gln Leu Leu Glu Leu Glu His Gln
174         195                 200                 205
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```
177 Phe Lys Leu Asn Lys Tyr Leu Ser Arg Pro Lys Arg Phe Glu Val Ala
178     210                 215                 220
181 Thr Ser Leu Met Leu Thr Glu Thr Gln Val Lys Ile Trp Phe Gln Asn
182 225                 230                 235                 240
185 Arg Arg Met Lys Trp Lys Arg Gln Lys Lys Ala Lys Glu Gln Ala Ala
186                 245                 250                 255
189 Gln Glu Ala Glu Asn Glu Lys Gly Gly Gly Gly Gly Glu Asp Lys Ser
190             260                 265                 270
193 Gly Pro Arg Glu Leu Leu Leu Pro Gly Pro Glu Lys Gly Gly Gly Arg
194         275                 280                 285
197 Arg Leu Arg Glu Leu Pro Asp Ser Glu Pro Glu Asp Glu Glu Glu Glu
198     290                 295                 300
201 Glu Glu Glu Glu Glu Glu Ala Glu Ala Gly Arg Cys Cys Pro Tyr His
202 305                 310                 315                 320
205 Ser Ser Asp Cys Ser Glu Ala Asp Glu Glu Asp Ser Gln Ser Gly Gly
206                 325                 330                 335
209 Arg Pro Gly Ala Pro Pro Pro Pro Pro Ala Gln Pro Gln
210             340                 345
213 <210> SEQ ID NO: 4
214 <211> LENGTH: 1513
215 <212> TYPE: DNA
216 <213> ORGANISM: chick embryo
218 <400> SEQUENCE: 4
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221 gacgcgctgc tggctgtcga tccccccaag gcggcggcgc agagcgctcc gctgccctgg    120
223 tcaccggcgg ctccggcggc ggcagccctc cgtcttcgtc gtcctcctcg tcgtcgtcgt    180
225 cctcctcttc ttccgagctc cccgccgact gcccgcgcac cgacagcccc tctccgcctc    240
227 gcctgctgcc cgcgcactgc gcgctgctgc ccaaagccgc cttcctgggc gggggggggac    300
229 ccgggggcgg ccacccgcag caccacgccc tggggctgca ccccgcgggg ccgggcgggc    360
231 cgggcctcta cgggcacccg gtgtacggct acccggcgtt gggcgggcag cacccggcgc    420
233 tctcctattc ctattcgcaa gtgcagggag cgcaccccgc gcatccctcc gccgacccca    480
235 tcaagctgag cgccggcacc tttcagctgg accagtggct gcgggcgagc acggccggca    540
237 tgatcctgcc caaaatgccc gacttcggct ctcaggcgca gtccaacctg ctggggaagt    600
239 gccggcggcc gcgcaccgcc ttcaccagcc agcagctgct ggagctggag caccagttca    660
241 aactcaacaa gtacctctcc cggcccaagc gcttcgaggt ggccacgtcg ctgatgctca    720
243 ccgagacgca ggtgaagatt tggttccaga accgccgcat gaaatggaag cgccagaaaa    780
245 aggcgaagga gcaggcggcg caggaggcag agaacgagaa aggaggagga ggaggagagg    840
247 acaaaagcgg gccgagggaa ctgctgctgc ccggcccgga gaaaggcggc gggaggcggc    900
249 tgagggagct gcccgacagc gagcccgagg acgaggagga ggaagaagag gaggaagagg    960
251 aggccgaggc cgggcggtgc tgcccctacc actcctccga ctgctccgag gcggacgagg   1020
253 aggactcgca gtccggagga cggcccggag ccccccccgcc acccccccgca cagccgcagt   1080
255 gagcccacgg ccgccccgtc ggggccgccc ccggcaacgg agcctcctgg ccccgctctc   1140
257 catcccgctc tcccatccct ccctgctcgg agggggacgc ggaaagggat ctcccgtctg   1200
259 ccgagcggga gggaggattc acacagtgtt attattgact gagaagcggc cacgacttga   1260
261 gccccccctcc ccgccccgcc ctatcggaac cgtttccttc ttaccatata tcgggaaaag   1320
263 tgtttatgtc atgaacgtta aaactgctgc agatctcaat actgtcttta ttttgtatat   1380
265 cctatttata aaaaaggcaa aatgaattcc tctacttatg catgctaaat tattacccag   1440
267 ccccttccgc ctgaggtggg ggggaggaat ataaataaag agcgttttgt actgtgaaaa   1500
269 aaaaaaaaaa aaa                                                     1513
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VERIFICATION SUMMARY DATE: 12/27/2002
PATENT APPLICATION: **US/09/820,598** TIME: 14:16:11

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